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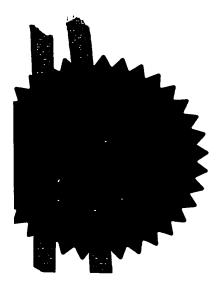
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Signed

Dated

21 October 2004

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Patents Act 1977 (Rule 16)

THE PATENT

02SEP03 E834370-1 D029 ₽01/7700 0.00-0320521.8

The Patent Office

Cardiff Road Newport South Wales NP9 1RH

Request for grant of a patent

02 SEP 2003 (See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in

this form)

Your reference

MRH/P103166GB

2. Patent application number (The Patent Office will fill in this part) 0320521.8

- 2 SEP 2003

3. Full name, address and postcode of the or of each applicant (underline all surnames)

Michael Keith Ching 5 Bulkeley Close Englefield Green Surrey **TW20 0NS** 

Patents ADP number (if you know it)

2894231001

If the applicant is a corporate body, give the country/state of its incorporation

4. Title of the invention

SCAFFOLDING DEVICE

Name of your agent (If you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

Harrison Goddard Foote

Belgrave Hall **Belgrave Street** Leeds LS2 8DD

Patents ADP number (If you know it)

44571001

763131000

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number (if you know it)

Date of filing (day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing (day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer Yes' if.

a) any applicant named in part 3 is not an inventor, or

b) there is an inventor who is not named as an applicant, or .

c) any named applicant is a corporate body. See note (d))

#### Prents Form 1/77

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Continuation sheets of this form

Description

4 /

Claim (s)

Abstract

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Drawing (s)

4 + 4 /

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Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature Harr Goden Ro Date 01-09-03

Name and daytime telephone number of person to contact in the United Kingdom

Michael Harrison

0113 233 0100

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#### **Scaffolding Device**

#### Field of the Invention

5 This invention relates to devices for use in connection with scaffolding and in particular to devices for preventing unauthorised personnel from undoing or removing a scaffold fitting or part of a scaffold secured by a scaffold fitting.

#### **Background of the Invention**

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A typical scaffold fitting has two hinged together components which can be located about a scaffold tube. A bolt is held captive by one of the parts of the fitting and may be manoeuvred into a gate in the other part of the fitting and then held in place by means of a nut, typically a hexagonal shaped nut, for instance a 7/16" or ½" Whitworth size nut.

Such nuts can be easily undone by a spanner or wrench which are readily available to any person. Unauthorised removal/tampering with scaffold fittings is a major and hazardous problem in the industry and could have catastrophic results. Scaffolding invariably includes items such as tie members, braces and anchorage points all of which are secured with scaffold fittings (also known as clamps or clips) upon which the security, stability and safety of the scaffolding depends.

#### Statements of the Invention

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According to the present invention there is provided a device for preventing the removal of tampering with a scaffold fitting, the device comprising means for at least partly surrounding the nut of the fitting preventing access to the nut by means of any form of unfastening tool and, integral therewith, means extending through the gate of the fitting to a position adjacent the bolt of the fitting between the two hinged parts of

the fitting, said latter means being provided with means for securing the device to said bolt at said location.

#### **Brief Description of the Drawings**

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The accompanying drawings are as follows:-

Figure 1A is a side view of a scaffold fitting secured to a scaffold tube;

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Figure 1B is a similar view on another type of scaffold fitting;

Figure 1C is a view on arrow B of Figure 1B;

Figure 1D is a top plan view of the fitting and tube of Figure 1C;

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Figure 1E shows the fitting of Figure 1A without the tube and without the bolt located in place;

Figure 2A is a first perspective view of a device in accordance to the present 20 invention;

Figure 2B is a second perspective view of the device of Figure 2A;

Figure 2C is a third perspective view of the device of Figure 2A;

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Figure 3A shows the device of Figure 2A being moved into position relative to a scaffold fitting;

Figure 3B shows the device of Figure 2A located in position on a scaffold 30 fitting;

Figure 3C is a further view of the device of Figure 2A located in position relative to a scaffold fitting; and

Figure 4 shows examples of designs of the heads of tools for use with a device of the invention.

## **Detailed Description of the Invention**

The invention will now be described, by way of examples only, and with reference to the accompanying drawings.

Referring to Figures 1A to 1E, a scaffold fitting 1, which may be in the form, for instance, of that shown in Figure 1A or Figure 1B, is shown secured to a scaffold tube 3. The fitting includes hinged together components 5 and 7 and a bolt 9, the head of which is held captive in component 5 and the free end of which may be positioned between the bifurcated arms of components 7 which form the gate 11. When so positioned, a hexagonal nut 13 may be screwed in the direction towards the head of bolt 9 until it is tight against component 7 thereby holding the fitting firmly in page on tube 3.

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It will be appreciated that the above described fitting can be easily loosened or removed from tube 3 simply by applying an appropriate tool, such as a spanner, to the hexagonal nut 3.

Referring to Figures 2A to 2C, device in accordance with the present invention is a single part construction, normally made of hard metal (or any other hard material) which has two functional components. The first component is a domed head member 21 in which a short, hollow cylindrical section 23 is provided at one end with an integral curved cap 25 having a central bore 27 extending therethrough into communication with the hollow interior of cylindrical section 23.

Extending from cylindrical section 23 is a longitudinally extending leg or wing 29 which is provided with a radial screw threaded bore 31. Located within bore 31 is a grub screw 33 having an outer end provided with a specially shaped "keyhole" such as one of those illustrated in Figure 4. A corresponding tool (not shown) is required with a "key" shape to correspond to the keyhole configuration of grub screw 33.

Referring to Figures 3A and 3B of the accompanying drawings, a device 35 in accordance to the present invention is applied to a scaffold fitting 37 which in turn is located around scaffold tube 39. In order to apply device 35, it is slid over nut 41 by moving it relative to fitting 37 as indicated by the arrow in Figure 3A. This movement is continued until the free end of bolt 43 is positioned as shown in Figure 3B extending through bore 45 of the device and with the hexagonal nut 47 located within the relatively enlarged space defined by cylindrical section 49 of the device. With the device in this position the wing 51 extends across the end of part 37 of the scaffold fitting (not shown in Figure 3B). Applying the special tool to the outer end of grub screw 53 enables this screw to be moved into engagement with bolt 43, as indicated in Figure 3B. When grub screw 53 is tightened against bolt 43, the device cannot be removed and the hexagonal nut 47 is no longer accessible, thereby preventing any unauthorised tampering.

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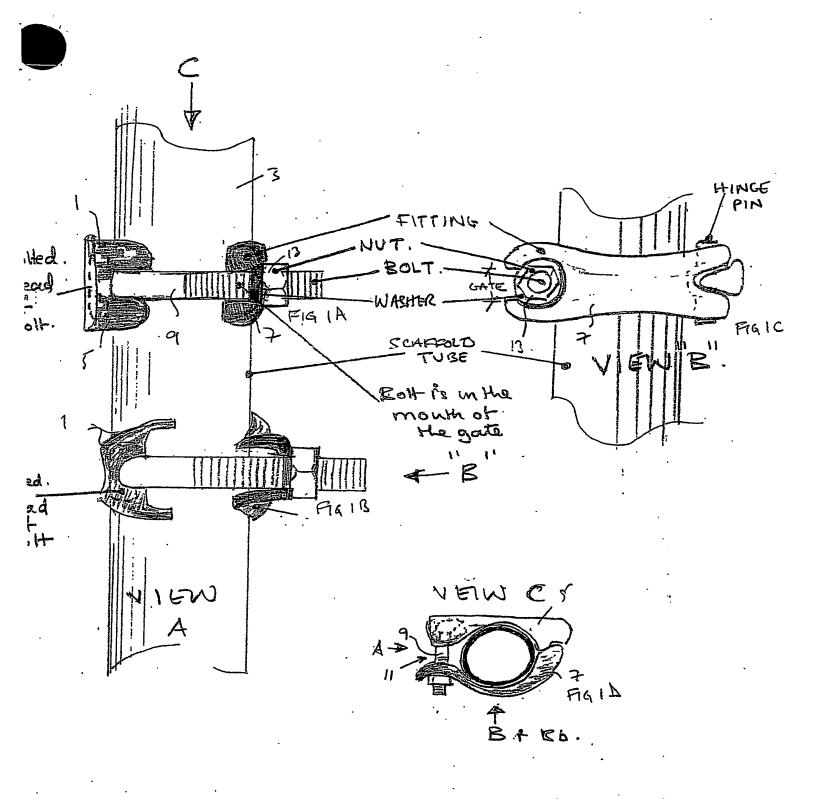
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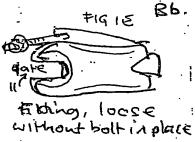
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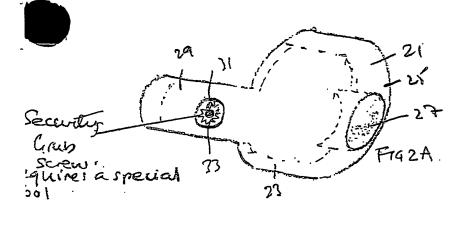
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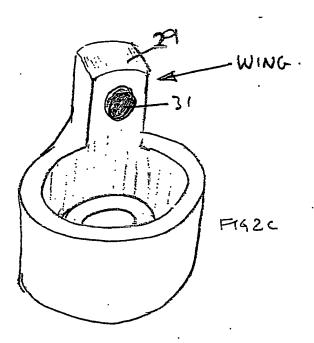
As indicated above, a device in accordance with the present invention may be made from a hard metal, examples being steel, tool steel, stainless steel or indeed any other appropriate material.

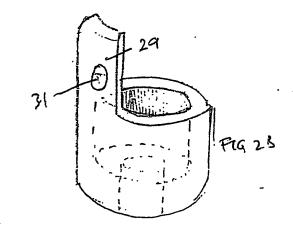
A device in accordance to the present invention can be made clearly visible and it may, for instance, be brightly coloured and/or coated with a reflective material. Visibility is particularly important when there is a "duty of care" to ensure that unauthorised or forced removal will be readily noticed by a safety officer or any other appropriate person.

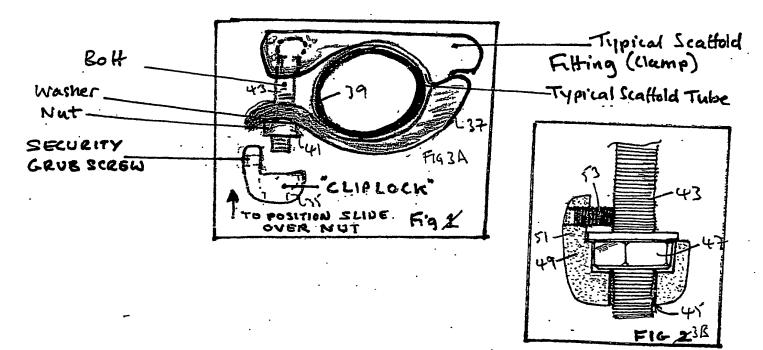


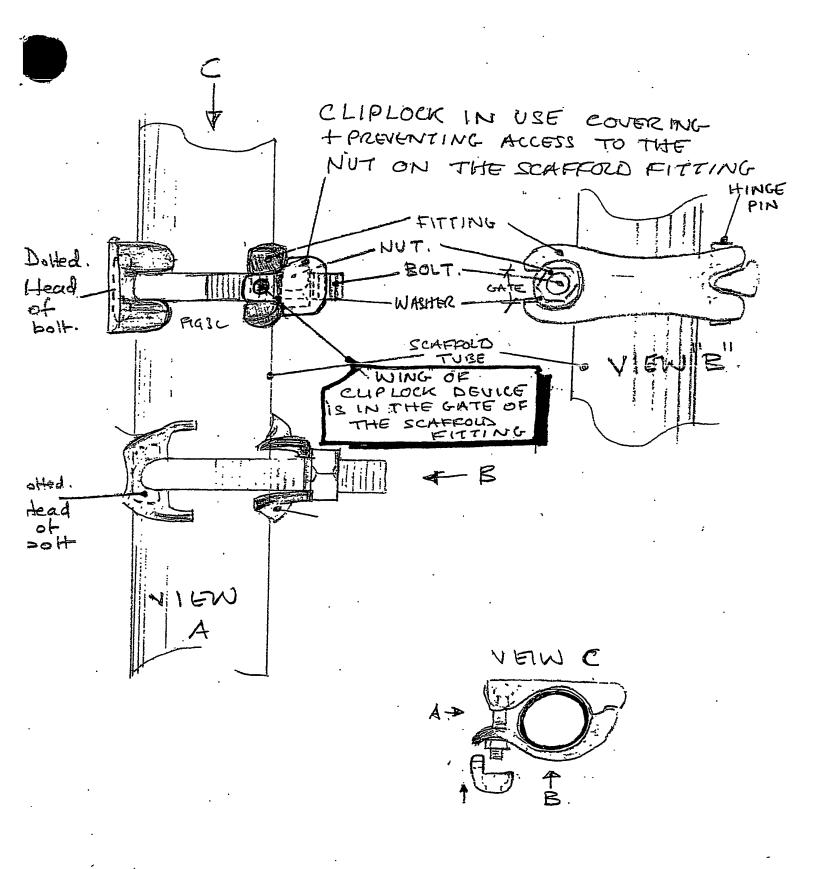


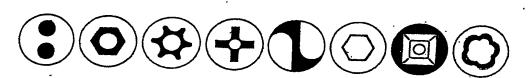












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